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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,411	04/19/2001	Marion Detert	Beiersdorf 652.1-KGB	9352

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NORIS McLAUGHLIN & MARCUS, P.A.
30TH FLOOR
220 EAST 42ND STREET
NEW YORK, NY 10017

EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

7

DATE MAILED: 03/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/838,411

Applicant(s)

DETERT ET AL.

Examiner

D. R. Wilson

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-- Th MAILING DATE of this communication app ars on th cov r sh et with th correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-5 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION**Response to Restriction Requirement**

1. Applicant's election with traverse of the inventions of Group I, Claims 1-4 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that if the inventions of Group I were found to be allowable that the inventions of Group II must also be novel and unobvious. This is not found persuasive because the converse is not true, i.e., if the inventions of Group II had been examined and found to be allowable, then the inventions of Group I would not necessarily be novel and unobvious. However, if applicant wishes to clearly admit on the record, that the inventions of Group II are obvious over the inventions of Group I, then the Examiner will rejoin the claims. However, if the examiner then finds the inventions of Group I unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the Group II inventions.

2. The requirement is still deemed proper and is therefore made FINAL. Claim 5 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

Election of Species Requirement

3. Although the previous Examiner had required an election of two species, it was unclear to this Examiner what election was being required and what applicant had elected. Thus, a new election of species requirement was made.

4. This application contains claims directed to patentably distinct species of comb polymers.

5. Applicant is required under 35 U.S.C. § 121 to elect a **single ultimate** disclosed specie of a comb polymer for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Where specific species are not identified in the claims applicant should elect specific specie from the specification. An alternative method of election is to identify an Example which collectively exemplifies the elected species. Currently, only Claim 1 is generic.

6. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an

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allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

8. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Conclusion to Restriction/Election Requirement

9. During a telephone conversation with Mr. Kurt G. Briscoe on 3/6/03 a provisional election was made with traverse to prosecute the invention of the specie of comb polymer as exemplified in Preparation Example 1. Affirmation of this election must be made by applicant in replying to this Office Action.

Claim Rejections - 35 USC § 112, First Paragraph

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. ***Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for comb polymers wherein:***

a. the polyester side-arms contain salts of sulfonic acid, does not reasonably provide enablement for polyester side-arms containing sulphone groups,

b. the main chains are a polyacrylic acid, polymethacrylic acid, or an ester of these acids with C₁-C₂₂ aliphatic, cycloaliphatic or aromatic alcohols, does not reasonably provide enablement for main chains of polymeric aliphatic, cycloaliphatic and aromatic polycarboxylic acids and derivatives thereof, and

c. the side chains are attached to the main chain through ester linkages, does not reasonably provide enablement for polyester side chains attached to the main chain through an ether linkage (Claim 3 only), and

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The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

12. In regards to (a), the only enablement in the specification is for comb polymers wherein the polyester side arms contain sulfonic acid groups in salt form. Sulphone groups are not acid groups, but rather an "-SO₂-" group bearing two organic radicals bonded to sulfur, and further it would be unclear how such groups are neutralized. Referring to sulfonic acid groups or their salts as sulphones is repugnant to the term's well known usage. (See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947)). It is assumed in the examination discussed below that applicant intended sulphonic salt groups as opposed to sulphone groups.

13. In regards to (b), polyacrylic acid, polymethacrylic acid, or an ester of these acids, are polymeric acrylic acid, methacrylic acid, or esters of these acids. Polymeric aliphatic, cycloaliphatic and aromatic polycarboxylic acids, would be polyanhydrides. Although such polyanhydrides are known, they would not be effective in the instant invention as they would not result in comb polymers, by any method taught in the specification.

14. In regards to (c), the formulas shown in Claim 3 indicate an attachment of the polyester side chain through a peroxide linkage, i.e., "G" is a unit bearing two terminal oxygen atoms, whereas the only teaching in the specification is attachment through an ester group. It may be that applicant intended the "-O-" at the left end of each of the formulas to be a carbonyl group, i.e., "-C(O)-", which is enabled, but this isn't shown in either the claims or the specification.

Claim Rejections - 35 USC § 112, Second Paragraph

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. ***Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.***

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17. The language of Claim 2 is indefinite because given enough chemistry, almost any compound could be a derivative of the specified polycarboxylic acids. Therefore it is unclear what compounds are included in "derivatives thereof".

OK

18. The language of Claim 2 is further indefinite because the language "such as" and "for example", leads to confusion over the intended scope of a claim. Description of examples or preferences is properly set forth in the specification rather than the claims. See M.P.E.P. § 2173.05(d)

OK

19. The language of Claim 3 is indefinite for a number of reasons, which follow.

a. The language is indefinite because it is more than one sentence, or a collection of sentence fragments as indicated by the presence of at least six periods indicating the end of a sentence. It is required that each claim is the object of a single sentence.

✓

b. Comb polymers as set forth in claim 1 cannot be chosen from the polyesters of Formulas I, II and III, because the formulas are not comb polymers. Presumably applicant meant to say "comb polymers of Claim 1 having polyester side-arms of Formula I, II or III".

OK

c. Improper Markush groups are used throughout the claim.

When materials recited in a claim are so related as to constitute a proper Markush group, they should be recited in the conventional manner, or in the alternative. For example, "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, or alternatively, "wherein R is A, B, C or D" is also proper. See M.P.E.P. § 2173.05(h).

NO

Applicant needs to carefully review the claim language and use one of the alternative forms discussed above at each place that a Markush group is specified.

d. The statements of preferable, as well as advantageous, ranges such as that used concerning the molecular weights and the various components of formulas I-III are also indefinite.

OK

A broad range or limitation followed by linking terms (e.g., preferably, maybe, for instance, especially) and a narrow range or limitation within the broad range or limitation is considered indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. *Ex parte Steigewald*, 131 USPQ 74; *Ex parte Hall*, 83 USPQ 38.

e. It can not be told whether or not the "average molecular weights" are on a number average, weight average, or some other basis. The difference between weight average and number average molecular weights would be expected to be at least a factor or two for the

NO

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polymers disclosed making the limits of the claims indefinite. Further, "p" and "o" would not be expected to have any effect on the molecular weight of the main chain.

f. It is not seen that the comb polymers with the structures taught could possibly have a molecular weight as low as 200. OK

g. It is also not seen that the molecular weight of the unit "G" has any relationship to the average molecular weight of the main chain as is currently indicated for limitations of coefficients k and m. m

h. In the definition of "G", "D", "R¹" and "R²" the language is further indefinite because of the terms "can also be", "may also be", and "can be", making it unclear as to whether the groups are, or are not as defined. Generally, this type of rejection can usually be overcome by using "is" or "are". "Do not necessarily have to be" is also seen to be indefinite. It is recommended that language such as "are the same or different" be used.

i. The definition of "T" is further indefinite because "T" is not a compound but rather a radical or group. OK

j. The definition of "R¹" is further indefinite because there are no "amines" present which have "alkyl positions", rather there are "ammonium" compounds present. Further, the alkyl positions cannot be occupied by hydroxyl groups, else they would no longer be alkyl groups. OK

k. The definition of "R²" is further confusing and unclear because of the use of parenthetical expressions as well as the "can be" language as discussed above. It is Patent Office Policy not to permit parenthetical expressions in the claims as it is not known how they further limit the claimed subject matter. It is suggested that the parentheses be removed and the language "wherein" be substituted. It is further unclear how radicals are bridged by a monovalent ether function "-O-R⁵". NO

20. Claim 4 is indefinite because as above, it can not be told whether or not the "average molecular weights" are on a number average, weight average, or some other basis. The language is further indefinite for the reasons stated above regarding the use of the terms "preferably" and "advantageously".

Obviousness Double Patenting Rejection

21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

22. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

23. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

24. **Claims 1-4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-12 of copending Application No.**

10/090,525. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are generic to those of the claims in 10/090,525.

25. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Evidence of Common Ownership

26. Claims 1-4 are directed to an invention not patentably distinct from Claims 1-4 of commonly assigned copending Application No. 10/090,525, which has a different inventive entity. The reasons are discussed above.

27. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending Application No. 09/838,411, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78(c) and 35 U.S.C. 132 to either show that the conflicting inventions were commonly owned at

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the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

28. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

29. Applicant is reminded of the new rules for evidence of common ownership set forth in the OG Notice of 12/26/01 "Guidelines Setting Forth a Modified Policy the Evidence of Common Ownership, or an Obligation of Assignment to the Same Person, as Required by 35 U.S.C. 103(c)" which states:

"Applications and references (whether patents, patent applications, patent application publications, etc.) will be considered by the examiner to be owned by, or subject to an obligation of assignment to the same person, at the time the invention was made, if the applicant(s) or an attorney or agent of record makes a statement to the effect that the application and the reference were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same person." (Underlining added.)

Other Comments

30. Applicant uses the term "organyl unit(s)", which is not specifically defined, nor is it a term commonly used. Lacking any arguments to the contrary the Examiner has interpreted this to simply mean an organic group.

Art of Interest/Technological Background

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Becherer, EP'287 and EP'352 read directly on the instantly claimed invention, but are not available as prior art. No other art has been found which teaches or suggest the instantly claimed invention.

Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. R. Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

A handwritten signature in black ink, appearing to read 'D. R. Wilson', with a stylized flourish extending from the end.

D. R. Wilson
Primary Examiner
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